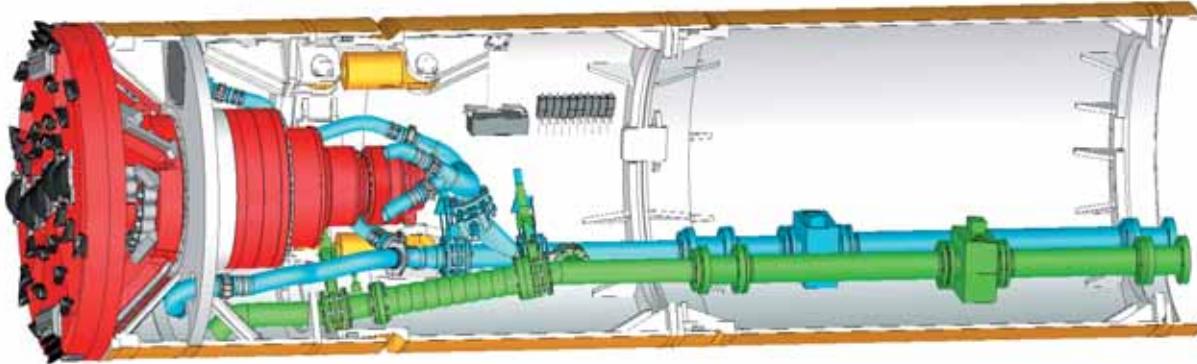


AVN 800 XC – AVN 2000 AC

Pipe Jacking



Special Features

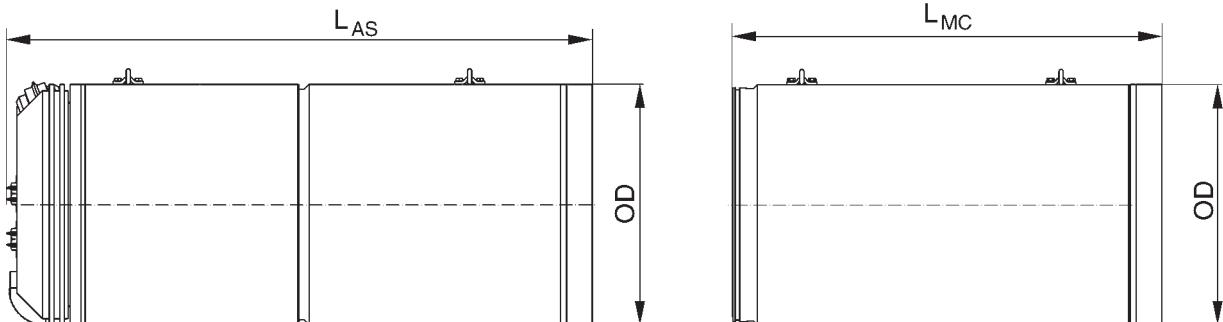
- Designed for soft ground, mixed ground and hard rock conditions by use of different cutting wheels (full face excavation).
- Most efficient use for short drives.
- Highly reliable steering operation due to inductive measuring system.
- Different (variable) flushing modes / jet systems to suit different ground conditions.
- High pressure water system for operation in cohesive soil.
- Providing highly effective cone crusher.
- Equipped with heavy duty long-life main bearing and high torque central drive.
- Hydraulic power pack in control container, usable for a certain range of diameters.
- Completely remote-controlled.
- All machines compatible to U.N.S. Guidance System.

Technical Data		AVN800XC		AVN800XC		AVN1000XC		AVN1200XC		AVN1400XC		AVN1500XC		AVN1600AC		AVN1800AC		AVN2000AC	
		Std*	Ext*	Std	Ext	Std	Ext	Std	Ext	Std	Ext	Std	Ext	Std	Ext	Std	Ext	Std	Ext
1. Articulated Shield																			
Outer diameter	mm	975	1 110	1 110	1 295	1 295	1 505	1 505	1 740	1 740	1 810	1 810	1 970	1 970	2 150	2 150	2 425	2 425	3 025
Pipe OD	mm	960	1 090	1 090	1 280	1 280	1 490	1 490	1 720	1 720	1 780	1 780	1 940	1 940	2 120	2 120	2 400	2 400	3 000
Pipe ID	mm	700	800	800	1 000	1 000	1 200	1 200	1 400	1 400	1 500	1 500	1 600	1 600	1 800	1 800	2 000	2 000	2 400
Main drive																			
Max. torque	kNm	55	90	150	195	281	310	310	445	640									
Revolution	LH / RH	0-7.4	0-7.1	0-5.4	0-3.5	0-3.2	0-3.2	0-3.2	0-3.3	0-2.0									
Rated Power	kW	55	75	75	75	90	110	110	132	132									
Roll correction		✓	✓	✓	✓	✓	✓	✓	✓	✓									
Steering																			
Steering cylinders		3	3	3	3	3	3	3	4	4									
Force per cyl. / oil pressure	kN/bar	393/500	393/500	664/500	752/500	1 005/500	1 005/500	1 005/500	1 005/500	1 272/500	1 272/500								
Stroke per cyl.	mm	50	50	60	60	60	60	60	100	100									
Control																			
Computer data logging system		✓	✓	✓	✓	✓	✓	✓	✓	✓									
Fuzzy control (automatic steering)		opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.									
Fully visualized process control		✓	✓	✓	✓	✓	✓	✓	✓	✓									
Active roll protection (el.-hydr.)		✓	✓	✓	✓	✓	✓	✓	✓	✓									
Suitability U.N.S.: ELS		✓	✓	✓	✓	✓	✓	✓	✓	✓									
ELS-HWL		✓	✓	✓	✓	✓	✓	✓	✓	✓									
GNS-P		✓	✓	✓	✓	✓	✓	✓	✓	✓									
2. Machine Can																			
Lubrication System		✓	✓	✓	✓	✓	✓	✓	✓	✓									
3. General Information																			
Pipe jacking		✓	✓	✓	✓	✓	✓	✓	✓	✓									
Drive length (recommended)	m	150	150	150	200	250	250	300	300	300									
Access to cutting wheel		–	–	–	–	–	–	–	✓	✓									
Waterproofness	bar	3	3	3	3	3	3	3	3	3									
Telescopic and interjacking station		opt	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.									
Slurry line diam.	mm	100	100	100	100	125	125	125	125	125									
High pressure water system		✓	✓	✓	✓	✓	✓	✓	✓	✓									
Low pressure jet system		–	–	–	opt.	opt.	opt.	opt.	opt.	opt.									

All measures and data represent the main feasibility of the machines. Individual solutions are possible. Errors excepted.

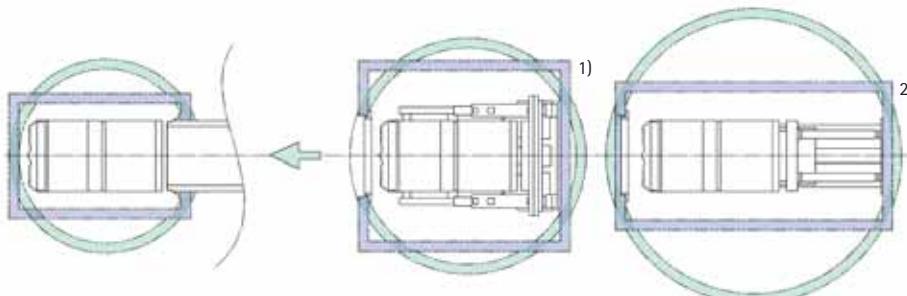
* Std = standard; Ext = extension kit

Machine dimensions



		AVN800XC	AVN800XC	AVN1000XC	AVN1200XC	AVN1400XC	AVN1500XC	AVN1600AC	AVN1800AC	AVN2000AC
Outer Diameter	OD mm	975	1 110	1 295	1 505	1 740	1 810	1 970	2 150	2 425
Length artic. shield	L_AS mm	2 600	2 900	3 000	3 200	3 400	3 400	3 900	4 200	4 400
Length machine can	L_MC mm	2 200	2 700	2 700	2 700	2 700	2 700	3 200	3 200	3 200
Max. single weight	W kg	4 500	6 200	7 600	10 500	13 000	17 000	22 000	25 000	32 000

Shaft dimensions



- 1) Compact jacking rig:
- smaller launch shaft needed
- 2) Main jacking station:
- continuous push with telescopic cylinders (time advantage)
- higher thrust capacity possible by adding of main jacks

		AVN800XC	AVN800XC	AVN1000XC	AVN1200XC	AVN1400XC	AVN1500XC	AVN1600AC	AVN1800AC	AVN2000AC
Launch Shaft Compact jacking rig	Pipe length	Shaft size								
	2 000 mm	Ø = 3.2m	Ø = 4.57m	Ø = 4.57m	–	–	–	–	–	–
	2 500 mm	4.5m x 3.5m	4.5m x 3.5m	4.5m x 3.5m	–	–	–	–	–	–
	3 000 mm	Ø = 3.2m	Ø = 4.57m	Ø = 4.57m	Ø = 4.87m	Ø = 5.27m	Ø = 5.27m	Ø = 6.5m	Ø = 7.0m	Ø = 7.5m
Launch Shaft Main jacking station	2 500 mm	4.5m x 3.5m	4.5m x 3.5m	4.5m x 3.5m	5.5m x 4.5m	5.5m x 4.5m	5.5m x 4.5m	6.5m x 4.5m	6.5m x 4.5m	7.0m x 5.0m
	3 000 mm	Ø = 4.57m	Ø = 4.57m	Ø = 4.57m	Ø = 4.87m	Ø = 6.5m	Ø = 6.5m	Ø = 6.5m	Ø = 7.0m	Ø = 7.5m
	2 500 mm	–	–	–	–	Ø = 8.5m	Ø = 8.5m	Ø = 8.5m	Ø = 9.0m	Ø = 9.0m
	3 000 mm	–	–	–	–	8.0m x 4.5m	8.0m x 4.5m	8.0m x 4.5m	8.5m x 4.5m	9.0m x 4.5m
Reception Shaft	L_AS	2 600mm	2 900mm	3 000mm	3 200mm	3 400mm	3 400mm	3 900mm	4 200mm	4 400mm
	Circular	Ø = 3.0m	Ø = 3.4m	Ø = 3.6m	Ø = 4.5m	Ø = 4.5m	Ø = 5.0m	Ø = 5.0m	Ø = 5.5m	Ø = 6.0m
		2.9m x 2.0m	3.2m x 2.0m	3.4m x 2.5m	4.5m x 2.5m	4.5m x 2.5m	4.5m x 2.5m	5.0m x 3.0m	5.0m x 3.0m	5.5m x 3.5m

All dimensions according to 10m shaft depth.

Machine type description e.g. AVN ¹⁾ 1800 ²⁾ T ³⁾ B ⁴⁾			
¹⁾ Machine type	²⁾ ID of jacking pipe	³⁾ Access to cutting wheel	⁴⁾ Type of container, power transfer from container to machine
X = no access			B = electric cable to machine, power pack in machine
T = central door			C = hydraulic drive from container directly into machine
A = door above main drive or in top of pressure wall			E = electric cable from container directly into machine
			H = medium voltage supply to machine (> 1000V)

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